

**In the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A recombinant viral construct comprising an avipox viral vector or functional derivative thereof which incorporates a first nucleic acid molecule encoding one or more HIV antigens or derivatives thereof and a second nucleic acid molecule encoding a cytokine or functional derivative thereof wherein said recombinant viral construct is effective in inducing, enhancing or otherwise stimulating an immune response to said HIV antigen.
2. (Original) The recombinant viral construct according to claim 1 wherein said HIV is HIV-1.
3. (Original) The recombinant viral construct according to claim 2 wherein said HIV-1 antigen is Gag and/or Pol.
4. (Original) The recombinant viral construct according to claims 1, 2 or 3 wherein said cytokine is  $\gamma$ -interferon.
5. (Original) The recombinant viral construct according to claims 1, 2 or 3 wherein said cytokine is IL-2.
6. (Original) The recombinant viral construct according to anyone of claims 1-5 wherein said avipox virus is fowl pox virus.
7. (Original) The recombinant viral construct according to anyone of claims 1-5 wherein said avipox virus is canary pox virus.
8. (Original) The recombinant viral construct according to claim 1 wherein said

avipox viral vector is fowl pox virus, said HIV -1 antigens are Gag and/or Pol and said cytokine is  $\gamma$ -interferon.

9. (Original) A vaccine composition comprising an avipox viral vector or functional derivative thereof which incorporates a first nucleic acid molecule encoding one or more HIV antigens or derivatives thereof and a second nucleic acid molecule encoding a cytokine or functional derivative thereof wherein said recombinant viral construct is effective in inducing, enhancing or otherwise stimulating an immune response to said HIV antigen.

10. (Original) The vaccine composition according to claim 9 wherein said HIV is HIV-1.

11. (Original) The vaccine composition according to claim 10 wherein said HIV-1 antigen is Gag and/or Pol.

12. (Original) The vaccine composition according according to claims 9, 10 or 11 wherein said cytokine is  $\gamma$ -interferon.

13. (Original) The vaccine composition according to claims 9, 10 or 11 wherein said cytokine is IL-2.

14. (Original) The vaccine composition according to any one of claims 9-13 wherein said avipox virus is fowl pox virus.

15. (Original) The vaccine composition according to anyone of claims 9-13 wherein said avipox virus is canary pox virus.

16. (Original) The vaccine composition according to claim 9 wherein said avipox viral vector is fowl pox virus, said HIV-1 antigens are Gag and/or Pol and said cytokine is  $\gamma$ -interferon.

17. (Original) A pharmaceutical composition comprising the recombinant viral construct according to any one of claims 1-8 together with one or more pharmaceutically acceptable carriers and/or dilutents.

18. (Original) A method of inducing, enhancing or otherwise stimulating, in a mammal, an immune response to HIV said method comprising administering to said mammal an effective amount of the viral construct according to anyone of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.

19. (Original) The method according to claim 18 wherein said HIV is HIV-1.

20. (Original) The method according to claim 19 wherein said viral construct is a viral construct according to claim 3.

21. (Original) A method of inducing, enhancing or otherwise stimulating, in a mammal, an immune response to HIV said method comprising administering to said mammal an effective amount of the vaccine composition according to any one of claims 9-16 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.

22. (Original) The method according to claim 21 wherein said HIV is HIV-1.

23. (Original) The method according to claim 22 wherein said vaccine composition is a composition according to claim 11.

24. (Original) A method of treating a mammal, said method comprising administering to said mammal an effective amount of the viral construct according to any one of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate

an immune response to one or more HIV antigens.

25. (Original) The method according to claim 24 wherein said HIV is HIV-1.

26. (Original) The method according to claim 25 wherein said viral construct is a viral construct according to claim 3.

27. (Original) A method of treating a mammal, said method comprising administering to said mammal an effective amount of the vaccine composition according to any one of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.

28. (Original) The method according to claim 27 wherein said HIV is HIV-1.

29. (Original) The method according to claim 28 wherein said viral construct is a viral construct according to claim 3.

30. (Original) A method for the treatment and/or prophylaxis of HIV infection or AIDS in a mammal said method comprising administering to said mammal an effective amount of the recombinant viral construct according to anyone of claims 1-8 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.

31. (Original) The method according to claim 30 wherein said HIV is HIV-1.

32. (Original) The method according to claim 31 wherein said viral construct is a viral construct according to claim 3.

33. (Original) A method for the treatment and/or prophylaxis of HIV infection or AIDS in a mammal said method comprising administering to said mammal an effective amount

of the vaccine composition according to anyone of claims 9-16 for a time and under conditions sufficient to induce, enhance or otherwise stimulate an immune response to one or more HIV antigens.

34. (Original) The method according to claim 33 wherein said HIV is HIV-1.

35. (Original) The method according to claim 34 wherein said vaccine composition is a composition according to claim 11.

36-37. (Cancelled).

38. (Original) An agent useful for inducing, enhancing or otherwise stimulating, in a mammal, an immune response to HIV said agent comprising a recombinant viral construct according to any one of claims 1-8.